



UNITED STATES PATENT AND TRADEMARK OFFICE

MN
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,976	09/09/2003	Kuldipsingh A. Pabla	5681-08300	4139

35690 7590 06/08/2007
MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.
P.O. BOX 398
AUSTIN, TX 78767-0398

EXAMINER

HOANG, HIEU T

ART UNIT	PAPER NUMBER
----------	--------------

2152

MAIL DATE	DELIVERY MODE
-----------	---------------

06/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/657,976

Applicant(s)

PABLA ET AL.

Examiner

Hieu T. Hoang

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 06/06/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the communication filed on 09/09/2003.
2. Claims 1-35 are pending and presented for examination.

Claim Objections

3. Claim 1 is objected to because of the following informalities. Claim 1 recites the limitation "the other peer node" on line 16. There is insufficient antecedent basis for this limitation in the claim. For examining purpose, "another one of the peer nodes" on line 13 will be treated as "another peer node." Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 28-35 are rejected under 35 U.S.C. 101 as the claimed invention is directed to non-statutory subject matter. A computer-accessible medium comprising program instructions can be just a piece of paper having program codes written thereon and is therefore non-statutory. Furthermore, page 174 of the specification defines computer-accessible medium as a transmission medium or signals such as electrical, digital signals... These are all non-statutory subject matter under 35 U.S.C. 101.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2152

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1, 20, and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 1 recites "the other peer node" which seems to refer to the other one of the peer nodes on line 16. However, the claim also recites "other peer nodes" on line 17. It is not clear whether the other peer node is one of the "other peer nodes" or not. Appropriate correction is required. For examining purpose, "other peer nodes" will be treated as other peer nodes different from the one of the plurality of peer nodes on line 9 and the other peer node.

9. Claims 20 and 28 are rejected for the same rationale as in claim 1.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1, 4, 12, 15, 20, 24, 25, 28, 32 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Saulpaugh et al. (US 2004/0122903, hereafter Saulpaugh).

12. For claim 1, Saulpaugh discloses a system, comprising: a network; a plurality of peer nodes coupled to the network (fig. 1, peers in a peer-to-peer network); one of the plurality of peer nodes configured to:

- publish content cached on the peer node on the network ([0085], [0074], a node publishing a role, which contains instances associated with the node and also routing information that allows messages to be routed from the node to remote role instances associated with other nodes); and
- provide the content to another one of the peer nodes in response to a request for the content from the other peer node ([0082], [0083], [0012], grant a role (a right to publish instances of that role) in response to a request for a role); wherein the other peer node is configured to cache the content and publish the content for access by other peer nodes on the network ([0086], [0087], forward a published role to other nodes, fig. 6-8, role instance or content is published from a original node to other nodes).

13. For claim 12, Saulpaugh discloses a system, comprising:

Art Unit: 2152

a primary content publisher peer node configured to cache content and publish the cached content for access by other peer nodes on a network ([0086], a original node publishes a role instance by broadcasting to other nodes);

an edge content publisher peer node ([0086]) configured to:

- receive the content from the primary content publisher peer node ([0086], an edge is may be created that maps upon the link over which the publish message was received);
- cache the received content; and publish the received content for access by the other peer nodes on the network ([0074], [0086], role instances can be broadcasted to other nodes or edge nodes which will receive and publish the broadcast message to other further nodes).

14. For claim 20, Saulpaugh discloses a method, comprising:

- a peer node publishing cached content for access by other peer nodes on a network ([0086]);
- another peer node requesting the content on the network ([0082], request for a role);
- the other peer node receiving the content from the peer node; the other peer node caching the received content; and the other peer node publishing the received content for access by the other peer nodes on the network ([0074], [0086], role instances can be broadcasted to other nodes or edge nodes which

will receive and publish the broadcast message to other further nodes).

15. For claim 28, the claim is rejected for the same rationale as in claim 20.

16. For claim 4, Saulpaugh further discloses an edge peer node configured to send a request for the content on the network; receive a portion of the content from the peer node in response to the request; and receive another portion of the content from the other peer node in response to the request ([0187], fig. 75, a content portion is an instance of a role that can be received from any nodes that hosts that instance, [0076], a portion of content can be retrieved at one node, other portions from other nodes).

17. For claim 15, Saulpaugh further discloses an edge peer node configured to: send a request for the content on the network; receive a portion of the content from the primary content publisher peer node in response to the request; receive a redirection to the edge content publisher peer node from the primary content publisher peer node; and receive another portion of the content from the edge content publisher peer node in response to the redirection ([0076], a peer that receives a query for instances of a role may host one or more instances and know redirecting routes to the remaining instances; so it responses to the query by returning the instances that it hosts together with routing information to other instances of that role).

Art Unit: 2152

18. For claims 24 and 32, the claims are rejected for the same rationale as in claim 15.

19. For claims 25 and 33, Saulpaugh further discloses the peer node is a primary publisher of the content, and wherein the other peer node is an edge publisher of the content ([0074], [0086], a primary publisher is a peer that originates the publishing of the instances, an edge publisher is a peer that receives the instances advertised by the primary publisher and itself publishes the instances to other peers).

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. Claims 2, 3, 5, 8, 9, 13, 14, 18, 19, 21-23, and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saulpaugh as applied to claims 1, 12, 20 and 28 above, and further in view of Marmor et al. (US 2002/0062310, hereafter Marmor).

Art Unit: 2152

22. For claim 2, Saulpaugh discloses the invention as in claim 1. Saulpaugh further discloses the plurality of peer nodes comprises an edge peer node ([0075], edge peer nodes pointing to other nodes via which the query message can be sent for a respective role instance) configured to:

Saulpaugh does not disclose:

- if the other peer node is nearer to the edge peer node on the network than the peer node, get the content from the other peer node; and
- if the peer node is nearer to the edge peer node on the network than the other peer node, get the content from the peer node.

However, Marmor discloses the same (fig. 4, fig. 5, [0013], [0046], a peer node requesting for service can receive the service (or some instances of that service) from a nearest peer, this can be done by comparing physical distances between the requesting peer and other peers that host same instance(s), automatic filtering can filter out or select the closest peer that host the instance)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Saulpaugh and Marmor in order to provide peer-to-peer services from the closest peer where the service is available in order to save unnecessary long distance communications costs or to locate a service that is closest to the requesting user.

23. For claim 3, Saulpaugh-Marmor discloses the invention as in claim 1. Saulpaugh-Marmor further discloses the edge peer node is further configured

Art Unit: 2152

to cache the content and publish the content for access by other peer nodes on the network (Saulpaugh, [0075], an edge peer node is just like one of the peer nodes that all can cache the content it receives and publish the content for access by other peer nodes).

24. For claim 5, the claim is rejected for the same rationale as in claim 2.

25. For claim 8, Saulpaugh discloses a system, comprising: a network; a plurality of peer nodes coupled to the network, wherein each of the plurality of peer nodes is configured to publish content on the network ([0085], [0074], a node publishing a role, which contains instances associated with the node and also routing information that allows messages to be routed from the node to remote role instances associated with other nodes); a peer node coupled to the network and configured to:

- send a request for a particular content on the network ([0105], a message for a role or content is sent to a set of nodes attached to a single tree by utilizing tree edges, [0082], [0083], [0012], grant a role (a right to publish instances of that role) in response to a request for a role); and
- receive the particular content one of the plurality of peer nodes on the network ([0289]-[0303], message for a role or a content and reply to the message).

Saulpaugh does not disclose receive the particular content from a nearest one of the plurality of peer nodes on the network.

However, Marmor discloses the same (fig. 4, fig. 5, [0013], [0046], a peer node requesting for service can receive the service (or some instances of that service) from a nearest peer, this can be done by comparing physical distances between the requesting peer and other peers that host same instance(s), automatic filtering can filter out or select the closest peer that host the instance)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Saulpaugh and Marmor in order to provide peer-to-peer services from the closest peer where the service is available in order to save unnecessary long distance communications costs or to locate a service that is closest to the requesting user.

26. For claim 18, the claim is rejected for the same rationale as in claim 8.

27. For claim 9, the claim is rejected for the same rationale as in claim 1.

28. For claims 13, 21, and 29, the claims are rejected for the same rationale as in claim 2.

29. For claim 19, Saulpaugh-Marmor discloses the invention as in claim 18.

Saulpaugh-Marmor further discloses means for the peer node to cache and publish the particular content for access by other peer nodes on the network (Saulpaugh, [0086],

Art Unit: 2152

[0087], forward a published role to other nodes, fig. 6-8, role instance or content is published from a original node to other nodes).

30. For claims 14, 22, 23, 30 and 31, the claims are rejected for the same rationale as in claim 3.

31. Claims 6, 7, 16, 17, 26, 27, 34, and 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Saulpaugh as applied to claims 1, 12, 20, and 28 above, and further in view of Lehtikainen et al. (US 2004/0260701, hereafter Lehtikainen).

32. For claims 6, 7, 16, 17, 26, 27, 34, and 35, Saulpaugh discloses the invention as in claims 1, 12, 20, and 28 above. Saulpaugh does not explicitly disclose the plurality of peer nodes are member peers in a peer group, participate in a peer-to-peer networking environment implemented in accordance with one or more peer-to-peer platform protocols for enabling peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share network resources in the peer-to-peer environment.

However, Lehtikainen discloses the same ([0038], a peer group for file sharing)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Saulpaugh and Lehtikainen in order to provide various services such as sharing, messaging, and chat and collaboration in a peer

Art Unit: 2152

group (Lehikoinen, [0029], [0031]).

33. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saulpaugh-Marmor as applied to claim 8 above, and further in view of Lehikoinen.

34. For claims 6, 7, 16, 17, 26, 27, 34, and 35, Saulpaugh-Marmor discloses the invention as in claim 8 above. Saulpaugh-Marmor does not explicitly disclose the plurality of peer nodes are member peers in a peer group, participate in a peer-to-peer networking environment implemented in accordance with one or more peer-to-peer platform protocols for enabling peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share network resources in the peer-to-peer environment.

However, Lehikoinen discloses the same ([0038], a peer group for file sharing)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Saulpaugh-Marmor and Lehikoinen in order to provide various services such as sharing, messaging, and chat and collaboration in a peer group (Lehikoinen, [0029], [0031]).

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Harrow et al. US 2003/0074403. P2P services.
- Taylor et al. US 2002/0065919. P2P caching network.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

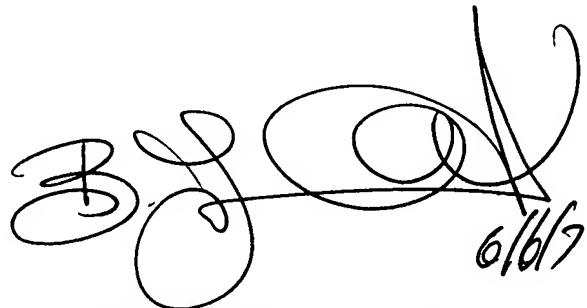
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2152

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



HH



BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER